To: Swertfeger, Jeff[Jeff.Swertfeger@gcww.cincinnati-oh.gov]
From: Allgeier, Steve
Sent: Mon 1/13/2014 1:27:31 PM
Subject: RE: Water contamination in West Virginia
EMN-A-AC-G-GC-500.docx
MSDS MCHM.PDF

Jeff,

Thanks for the information. If you can share the data from the PAC studies GCWW conducted over the weekend, that would be extremely helpful. The limited information I've found in the literature is conflicting – ranging from statements that MCHM is highly adsorbable to not adsorbable at all. Also, I think you mentioned that you're using GC-MS for the analysis – any information you can share about how you set up the method would also be helpful. Labs supporting the response are using a method developed by Eastman that uses GC-FID. I'm attaching the method summary sheet in case you are interested. This method is designed to evaluate percent purity, but I believe is being applied in a quantitative manner through use of a calibration curve.

You're probably up to date on the situation, but in case you missed anything, here's what I know. ATSDR recommended a "safe" concentration of MCHM of 1.0 ppm or less. As you know, the toxicity data for this contaminant is sparse, so I doubt there will be definitive information to support this level. That said, based on the limited data available, including a 400 ppm OSHA standard, the 1.0 ppm level seems appropriately conservative. In any case, WV has issued press releases stating that 1.0 ppm is the threshold level that will be used to determine whether or not the water is safe to use. The latest test results from the Elk River show concentrations below 1.0 ppm. The utility and State have also performed extensive distribution system sampling, but I haven't seen those results yet. However, based on the fact that concentrations in the river are below 1.0 ppm, the utility plans to start flushing operations soon. They'll also issue instructions to residents about how to flush premise plumbing. After that, they should be able to start lifting the use restrictions.

You probably already have it, but in case you don't, here's the MSDS for MCHM. Let me know if you have any questions.

Thanks,

Steve

From: Swertfeger, Jeff [mailto:Jeff.Swertfeger@gcww.cincinnati-oh.gov]
Sent: Friday, January 10, 2014 7:15 PM
To: Allgeier, Steve
Subject: RE: Water contamination in West Virginia

Steve, just an update if you are interested. We are working a bit with Huntington WV. They are finding at their plant that PAC seems to do a decent job of removing it. We will do our PAC work tomorrow. Early estimates say with dilution, should be pretty low concentrations once it is in the Ohio. We will be working with ORSANCO to do a bunch of river sampling. Fortunately, we were able to get some of the pure product from the West Virginia site and we seem to easily detect it on our GCMS. Don't know what the detection limit is though yet. This was a weird one and data extremely sparse. Even the toxicologists at DPIC and other places don't have much to go on. There is a little info on inhalation, but nothing on drinking. We will probably try to play it safe though and shut down our intakes as long as we can to let it flow by.

From: Allgeier, Steve [mailto:Allgeier.Steve@epa.gov]
Sent: Friday, January 10, 2014 12:15 PM
To: Swertfeger, Jeff
Subject: Water contamination in West Virginia

Jeff,

As you've probably heard by now, there was a chemical spill involving 4 – methylcyclohexane methanol, which has contaminated both the source and distributed drinking water. Has anyone at GCWW looked at removal of this contaminant (or a similar contaminant) by GAC? Based on chemical structure, I'd expect it to be adsorbed, but it would be nice to have some firsthand data. Thanks for any information you can share.

Steve

Steven C. Allgeier

USEPA, OW, OGWDW

Water Security Division

26 W. Martin Luther King Dr.

Cincinnati, OH 45268

Allgeier.Steve@EPA.GOV

Phone: 513-569-7131

Fax: 513-569-7191